

CLAIMS

What is claimed is:

1. An apparatus for the manufacture of an infusion pod for brewing a beverage, comprising:
  - a mold having a depression therein, the depression bounded by an opening and defining the shape of the bottom of the infusion pod, the opening of said depression being rimmed about with a mold sealing surface;
  - a form comprising a bolt and a bolt carrier, the bolt defining a protrusion in substantial conformity to the shape of the depression;
  - the bolt carrier, comprising:
    - a resilient member biasing the bolt outwardly from the bolt carrier; and
    - a bolt carrier sealing surface having a surface topography in substantial engagement conformity with the mold sealing surface; and
  - wherein the form is axially moveable relative to the mold to repeatedly bring the form into contact with the mold in such a manner as to bring the mold sealing surface and the bolt carrier sealing surface into juxtaposition while simultaneously bringing the bolt into the depression.
2. The apparatus of claim 1 wherein the resilient member has a spring coefficient high enough to conform a sheet of filter material to the shape of the depression and mold sealing surface so as to create a flanged filter cup in a cupping operation, yet low enough to avoid over packing a quantity of an infusible material deposited within the flanged filter cup in a sealing operation.
3. The apparatus of claim 1 wherein the resilient member is a spring.
4. The apparatus of claim 1 wherein the bolt is slideably mounted within the bolt carrier.

5. The apparatus of claim 4 wherein the bolt is slideably mounted within a channel defined by the bolt carrier and wherein the carrier sealing surface is rimmed about an opening of the channel.
6. The apparatus of claim 2 wherein the infusion material is coffee.
7. The apparatus of claim 1 wherein the filter material is a woven thermoplastic.
8. The apparatus of claim 1 wherein the filter material is filter paper.
9. The apparatus of claim 1, wherein said form is manually axially moveable relative to the mold.
10. The apparatus of claim 1, wherein said appliance is a portable unit adapted to operate on a kitchen countertop.
11. A method of manufacturing an infusion pod, comprising the steps of:
  - providing a mold having a depression therein, the depression defining the shape of the bottom of the infusion pod, the opening of the depression rimmed about with a mold sealing surface;
  - providing a form, comprising a bolt and a bolt carrier, the bolt defining a protrusion in substantial interfitting conformity to the shape of the depression;
  - the bolt carrier, comprising:
    - a resilient member to which the bolt is mounted such that the form is resiliently mounted to the bolt carrier; and
    - a bolt sealing carrier surface having a surface topography in substantial interlocking conformity with the mold sealing surface;
  - wherein the bolt carrier is axially moveably mounted relative to the mold to bring the form into contact with the mold in such a manner as to bring the mold sealing surface and the bolt carrier sealing surface into compressive contact while simultaneously bringing the bolt and the depression into interlocking contact; and

wherein the resilient member has a spring coefficient high enough to conform a sheet of filter material to the shape of the depression and mold sealing surface so as to create a flanged filter cup in a cupping operation, yet low enough to avoid overpacking a quantity of an infusible material deposited within the infusion pod in a sealing operation;

executing a cupping operation by forming a depression in said filter material; and  
executing a sealing operation on said filter material.

12. The method of claim 9 wherein said cupping operation comprises the steps of:

positioning a first sheet of filter material between the form and the mold;  
bringing the form into compressive contact with the mold so as to create a flanged filter cup in the cupping operation; and

withdrawing the form from the mold, leaving the flanged filter cup in the mold.

13. The method of claim 10 further comprising the step of filling the flanged filter cup with an infusible material.

14. The method of claim 9 wherein said sealing operation comprises:

positioning a second sheet of filter material between the form and the mold; and  
executing the sealing operation by bringing the form into compressive contact with the mold so as to seal the second sheet of filter material to the flanged filter cup around and about the flange, thereby creating the infusion pod.

15. An infusion pod manufactured by the method of claim 9.